Abstract

Adjustable filter and method for adjusting the frequency

For frequency tuning of a component operating with acoustic waves, it is proposed to provide a GDE layer (GDE) in close mechanical contact with a piezoelectric excitation layer (PS, PS1) which can significantly change their rigidity under a mechanical warping and therewith the sound propagation speed, whereby the degree of the material expansion or, respectively, compression can be adjusted by means of two control voltage electrodes (ES2) and a piezoelectric tuning layer (PS, PS2).

Figure 1

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